

Serial No. 09/832,649
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REMARKS

This is in response to the Office Action mailed on October 24, 2003. Claims 1, and 3-9 remain pending. Reconsideration of the application is requested in view of the following remarks.

Claims 1, 3, and 5-9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Huber et al. (U.S. Pat. No. 5,983,003). Applicants respectfully traverse this rejection. Claim 1 requires a first controllable brake that slows down the drive roller in order to cause the lifting apparatus to lift the drive roller out of a retracted position into a raised position wherein the brake is completely open during propulsion of the object and the brake does not slow down the drive motor during propulsion. Claim 1 also requires a second controllable brake that holds the lifting apparatus in the raised position.

Huber et al. fails to teach or suggest a controllable brake, rather, the Huber brake continuously applies a braking force which slows down the drive motor. Huber teaches that "[t]he drive shaft 31 of the drive motor 30 is lightly braked in a *known manner* by means of a braking mechanism 90 in order to enable the drive roller to be raised out of its resting position." (Col. 3, ll. 62-65).

Huber refers to the teachings of both Sundseth (U.S. Pat. No. 5,048,672) and Huber (U.S. Pat. No. 4,697,694) (hereinafter "the '694 patent") in the written description. These references disclose the state of the art at the time of the Huber invention. Sundseth teaches an uncontrollable brake device (22a, 22b, 23) which applies a continuous and uncontrolled braking force. (Col. 3, ll. 40-64). This braking force is necessary to pivot the pivot support 16 of the drive roll 10, so that the drive roll is lifted to a raised position. Without the continuous braking force of the braking device, the drive roller could not be pivoted into the raised position.

The '694 patent also teaches the use of an uncontrollable brake. As illustrated in Figure 4, the braking mechanism is virtually identical to that disclosed by Sundseth. (Compare to Figure 2 of Sundseth) The mode of operation of this device is the same as the Sundseth device. (Col. 11, ll. 31-63; Col. 12, ll. 31 - 54; Col. 13, ll. 11-22). Again,

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the braking mechanism applies a predetermined, continuous force during operation of the device. The braking force exerted remains the same during operation of the device. Thus, the known braking manner at the time of the Huber invention involved the use of an uncontrolled brake that constantly applies a predetermined, set braking force in order to maintain the drive roller in a raised position.

A person with ordinary skill in the art, having knowledge of the teachings of Sundseth and the '694 patent, would read Huber as disclosing an uncontrollable brake that applies constant braking force. Huber does not teach or suggest a modification of the braking mechanisms disclosed in the prior art. To the contrary, Huber teaches the braking mechanism employed in the invention works in "a known manner." For at least this reason, Huber fails to render claim 1 obvious.

Moreover, there is still a need for brake 70 in the Huber device despite the fact that brake 90 constantly applies a braking force. Brake 70 is necessary in order for a moving container to be stopped. In order to stop a moving container, both brakes 70 and 80 must be locked. Brake 70 locks the lifting cam 40 in the raised position, thereby maintaining the roller in the raised position regardless of whether brake 80 is being applied to stop the motor shaft from rotating. Thus, brake 70 allows the movement of a cargo container to be stopped. (Col. 4, ll. 57-65).

If the Huber device did not include brake 70, it would be impossible to stop a moving container. "To prevent an unintentional continued movement" of a container, brake 80 must be applied in order to lock the drive shaft of the motor 20. If brake 70 were absent, applying brake 80 would cause the roller to lower to the resting position since the lifting action cannot be effected by brake 90 when motor 20 is stopped. (Col. 4, l. 66 - Col. 5, l. 3) If the roller is in the lowered, resting position, it cannot maintain frictional engagement with the container in order to stop its motion.

The Examiner further argued that since the drive roller raises and lowers, brake 90 must not be constantly applied. To the contrary, however, this is how power drive units usually operate. When the drive roller is rotating, the braking force of brake 90 allows

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the lifting mechanism 40 to lift up the drive roller 30. When the electric motor (20) stops (and brake 70 is open), the roller lowers into its resting position. Thus, the fact that the roller is raised and lowered fails to demonstrate that brake 90 does not apply a constant braking force. Huber fails to teach or suggest the controllable brake required by claim 1, and thus fails to render claim 1 obvious.

The remaining claims depend from claim 1. Since claim 1 is an allowable base claim, the remaining claims are in condition for an allowance for at least this reason.

In view of the above, Applicant respectfully requests reconsideration of the application in the form of a Notice of Allowance.

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Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

By: John J. Gresens

John J. Gresens
Reg. No.: 33,112
JJG/TSW